

# Human Form and Proportions

By Raieco

Submitted: September 8, 2007

Updated: September 8, 2007

*This is my version of data I found on the net. I took it a further than the original publishers, so it may be more helpful. I have never had a real education in form so I had to teach myself. Don't hold this info to be rock solid truth.*

Provided by Fanart Central.

<http://www.fanart-central.net/stories/user/Raieco/48383/Human-Form-and-Proportions>

**Chapter 1 - Human Form and Proportions**

**2**

# 1 - Human Form and Proportions

This information is not to be taken as the gospel truth. I taught myself to draw and have almost no education in proportions. There could be discrepancies in these measurements. If you find that they work for you, good deal =). WARNING: a ruler (and possibly a basic calculator) may be needed...

The unit of measure for the human form is typically one human head. The human head is, on average, 26% taller than it is wide. If the head you are drawing is 10 centimeters tall, it will be about 7.4 centimeters wide. Likewise, if the head is 10 inches tall, it will be approximately 7.4 inches wide. The 10 : 7.4 ratio will be the unit of measure for this tutorial. You can round to 7.5 if it is easier for you. You can break this into two different units of measure- vertical units (VU's) and horizontal units (HU's)-- vertical unites being the longer.

\*Example (exact):

VU: ----- (1 full unit) 100  
HU: ----- (75% of a full unit) 75

\* \* \*

Start off by measuring out how tall you want your figure to be in relation to the rest of the picture. This height must not change or it will throw off the rest of the measurements. Now divide that height by eight. You can also take a smaller distance and multiply it eight times to give you the height, but it is easier to accurately place your figure in a picture using the first method. This will give you the vertical units you will be using. Now take this unite and reduce it by 25%, or one fourth. This gives you the horizontal units you will use.

Now you will begin to place points on your picture. I would recommend creating a point to point stick figure to lay out the measurements first. The shoulders begin to form 1.5 vertical units from the top of the head and are 3 horizontal units wide (1.5 horizontal units from centerline). The arms are 3.5 vertical units long from this point- ending at the middle finger. The hand is a little less than one vertical unit long from the tip of the middle finger to the base of the wrist (closer to 80-85%). The elbows begin at approximately 2.75 vertical units from the top of the head.

The navel is 3.5 vertical units from the top of the head, 4.3 vertical units from the base of the feet. The torso ends at the groin 4 vertical units from the top of the head. The top of the kneecaps begin approximately 2.5 vertical units from the base of the feet.

These measurements will give you a good stick figure "skeleton" to begin construction the body around. The points can act as bending joints (assuming that particular body part bends), such as the shoulders, elbows, and knees.

These measurements will help you from a basis of the solid body. The arms are about half of a horizontal unit wide. The thickest part of the thigh is approximately one horizontal unit wide. The thinnest point of the torso (just above the navel) is about 1.75 horizontal units. The calves are one half of a horizontal unit wide.

It can get tedious to measure it out, and you may need to mark scales on the paper. You should

make this first piece your rough draft. You will trace it onto a clean sheet when every is measured out and looks good. Later, with enough practice, you will get to know how wide and tall the unit should be just by how it looks. Eventually you will be able to measure out the entire human form simply from sight and no measurements will be needed.

NOTE: All measurements are approximate and based on a digital male form. These measurements are based on a digital human figure standing strait with feet flat to the floor, arms to their sides, and fingers extended. The human form varies from person to person, creating a wonderful verity. Like the dimensions of different people, these measurements can and should change for different pictures. Additional research into muscle tone, lighting, and poses is recommended. Nothing works better than a live model or picture of some one.

\*Recourse: The Figure Drawing Lab - <http://drawinglab.evansville.edu/body.html>